

Devolution Through Transformation

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During the dark days (1950's) of naval aviation safety, approximately 800 aircraft were lost annually to accidents. The concept of a Replacement Air Group (RAG), more recently known as a Fleet Replacement Squadron (FRS), was introduced to enhance safety and standardization. One squadron per airframe is responsible for all initial training of aircrews, ensuring standardization for that aircraft. Following the introduction of the KC-130J in 2005, this practice will be curtailed and the KC-130 FRS will be retired. After the retirement of the FRS, the Air Force will stand up the Joint Maintenance and Aircrew Training System (JMATS) for joint C-130J training. However, the retirement of the KC-130 FRS will compromise the standardization and safety along with the combat readiness of the KC-130 community's aircrews.

### **History of the FRS**

The history of the FRS is rooted in the 1958 decision by the Chief of Naval Operations to realign squadrons and create dedicated training air groups. "The main things we [Training Air Groups] will accomplish are improved fleet readiness, longer deployment service from individual pilots, and improved safety records in squadrons using new aircraft" (Naval Aviation News 8). The accident rate prior to the formation of these training air groups was about twenty-nine per 100,000 flight hours. Within five years that rate had dramatically dropped to

seveenteen per 100,000 flight hours (Naval Safety Center 2). Although these rates are appalling when put in the modern context of 1.44 per 100,000 flight hours (Naval Safety Center 2) in fiscal year 1999, the dramatic 42% reduction could be attributed to the formation of the training air groups.

The FRS not only increased the safety of fleet pilots but also increased combat readiness. As Naval Aviation News reported "we [carrier air groups] could man that carrier in four and a half months with a trained, proficient group. Until the replacement training program began, it would have taken more than a year to reach operational readiness" (8).

### **Retirement of the KC-130 FRS**

#### **Background**

Currently, each branch of the military is being challenged to "transform" (Ricks Review A01) the way business is conducted. With the introduction of the new KC-130J ways are being explored to achieve cost and time savings with the training of the aircrews for the KC-130J. The KC-130J shares 90% similarity to the C-130J's being procured by the Air Force. A logical conclusion would be to combine each service's training squadron into a joint training squadron. This is how the idea of the JMATS is being proposed.

The problem with JMATS is the fundamental difference in how each service utilizes its aircraft. In the Marine Corps the KC-

130J is utilized as an assault support platform where its main mission is tactical aerial refueling. The Air Force also utilizes its C-130Js as assault support aircraft but does not use the C-130J for aerial refueling. The tactics executed by Marine operators of the KC-130J vary greatly from those used by the Air Force operators. Therefore, it is illogical to have a training squadron with a mission of training replacement pilots for combat but which cannot train in aircraft specific combat tactics. The cost savings realized through the retirement of the FRS will have to be expended to alleviate the training pressure imposed on the operational squadrons.

### **Adverse Effects**

The first adverse effect that can be conceptualized by the retirement of the Marine FRS squadron would be the decrease in safety and standardization for newly operational pilots. Currently, training standards dictate twenty simulator events and twenty-six flight events for FRS replacement pilot training (Cobham 1). JMATS plans call for replacement pilots to receive a mere seventeen simulator events and no flights in the K/C-130 (Holmes "KC-130"). Although the quality of simulators has dramatically improved during the digital revolution (Holmes interview), it is hard to fathom that new copilots would receive enough benefit from only seventeen simulator hops without adverse effects on safety and standardization. According to

Lieutenant General Hough, assistant commandant for aviation, the basis for the current plans is modeled after how airlines conduct their training (Lowe "Launching"). The problem with utilizing a comparison based on the airlines is that new hires, in airlines that operate aircraft similar to KC-130, average approximately 2,200 flight hours and many years of experience (Airline Pilot Careers). Unfortunately, KC-130 replacement pilots have approximately 200 flight hours and only eighteen months of experience by the time they report for JMATS training. While borrowing from the corporate world can make sense in some applications, JMATS fails to make a comparison that warrants incorporation into the military.

Another adverse effect of standardization would be the removal of a standardization clearinghouse and subject matter experts from the KC-130 community. Currently, the FRS is the NATOPS (Naval Air Training and Operating Procedures Standardization) Model Manager for the KC-130 NATOPS program. Fleet standardization is the primary job of one senior instructor. Granted, there will still be experts in the KC-130 community; but with operational commitments and the other requirements involved in running fleet squadrons, the availability of these experts as instructor pilots and mentors for junior pilots will be lost. Future plans fail to address when and who will assume the responsibility as the NATOPS Model

Manager (Holmes interview). Following the transition to the new KC-130J, the KC-130 community cannot afford to lose standardization during one of the most crucial times in its history.

The third adverse effect of the JMATS program would be the decrease in combat readiness for newly operational pilots. JMATS training conception calls for pilots to be "Fam/instrument" qualified at the completion of training (Holmes interview). This means that pilots will be able to take off and land during all weather conditions. The training fails to address combat tactics. Combat tactics would be placed on the busy training schedules of the operational squadrons until fiscal year 2006. Not only would operational squadrons have to continue to prepare for and fight the nation's conflicts and complete the transition to an entirely new aircraft, but they also would be responsible for the tactical training of incoming pilots. The incoming pilots would receive a dose of trial by fire. The first time replacement pilots step into a KC-130J would be at an operational squadron to learn combat tactics.

The idea of having fleet squadrons train replacement pilots is not a new idea. During fiscal years 2000-2002, East and West Coast fleet squadrons assisted the FRS with the training of pilots. During this period almost all available training sorties were diverted to replacement pilot training to the detriment of

qualified pilots. The combat readiness percentage of qualified pilots not only stagnated but also decreased following the inception of this program. One can only assume that the same negative effects would plague fleet squadrons under the plans of the JMATS program.

### **Counterarguments**

Proponents argue that cost savings is one of the benefits of the JMATS program. Fiscally, the JMATS program contains great ideas; however, how much are these fiscal savings worth in the face of the negative effects on safety? No price tag can be placed on an aircrew. Although the mission of the armed forces cannot be attained without some disregard of the safety to its members, how can anyone argue that safety can be acceptably diminished during *training*?

Another supposed benefit achieved by the retirement of the FRS is the increase in aircraft for fleet squadrons. Following the retirement of the FRS, the nine KC-130J aircraft planned for the FRS will be evenly distributed to the three fleet squadrons. Fleet squadrons would increase from the planned acquisition of twelve aircraft to fifteen aircraft (Holmes interview). Accompanying the additional aircraft will be additional aircrews (Holmes interview). However, the combination of the additional aircrews and replacement pilot training to an already overburdened training schedule seems doomed for failure. The



individual combat readiness percentage of aircrew personnel would stagnate in a community that is constantly tasked with providing support for deployed Marine Expeditionary Units. The JMATS program will thus result in the deployment of lower-qualified aircrews to tactical commanders.

Proponents of the retirement of the KC-130 FRS will also point to the lack of production accomplished by the current FRS. Consistently, the FRS was unable to fulfill the annual pilot training requirements. The KC-130 FRS has operated some of the oldest aircraft in the United States inventory since its inception. With an average age of over thirty-five, maintenance on these legacy KC-130 aircraft has been incredibly difficult for many years. These maintenance woes make it easy to see why the squadron has had problems completing its annual training requirements. During the introduction of the KC-130J, the KC-130 FRS was due to receive nine new KC-130J's. With the introduction of these new aircraft the maintenance capable rate would skyrocket and allow for many more training sorties to be completed.

Another fact that has failed mention in JAMTS planning is the comparison of the procurement timeline to the retirement of the FRS. The FRS has a planned retirement in fiscal year 2005 (Lowe "High-tech"). Completion of KC-130J procurement will not be completed until 2015. This gap will place KC-130F/R/T legacy

training upon the fleet and reserve squadrons for the next decade. The burden of replacement pilot training will be detrimental to squadron mission accomplishment.

### **Conclusion**

The training departments of KC-130 squadrons are already struggling to accomplish their current missions. If the FRS is retired and the responsibility for the training and standardization of replacement aircrews is dispersed to the KC-130 fleet squadrons, real decreases in safety and readiness will certainly be manifested. Moreover, because the FRS is being retired in 2005 and full introduction of the KC-130J is not anticipated until 2015 shortfalls and deficiencies in replacement pilot training will exist for over a decade for both legacy KC-130 and KC-130J aircraft. Although the JMATS program contains fiscally sound ideas, the losses in safety and standardization along with combat readiness preclude logical justification. Aircrew safety combined with the decrease in combat readiness provided to the MAGTF is reason enough not to retire the KC-130 FRS.

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